10/538057
JC17 Rec'd PCT/PTO 09 JUN 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method [[for]] of calibrating the phase of a microwave source, in which:

- [[a]] closing a calibration circuit ~~is closed~~, the calibration circuit comprising an injection channel connected to a measurement channel via microwave the source to be calibrated;

- [[a]] injecting test signal ~~is injected~~ through the source to be calibrated, the test signal being injected on the injection channel,

- measuring the phase φ_m of the signal having passed through the source to be calibrated ~~is measured~~, the phase of the signal being measured on the measurement channel, ~~characterized in that:~~

- measuring the amplitude A_m of the signal having passed through the source to be calibrated ~~is measured~~, the amplitude of the signal being measured on the measurement channel;

- opening the calibration circuit ~~is opened~~ at the source to be calibrated;

- injecting the test signal ~~is injected~~ on the injection channel;

- measuring the phase φ_f and the amplitude A_f of the signal present on the measurement channel ~~is measured~~;

- determining a corrected phase value φ_c ~~is determined~~, this corrected phase being the phase of a complex number U_c, calculated from two complex numbers U_m and U_f, where:

$$U_m = A_m \cdot \exp(i \cdot \varphi_m)$$

$$U_f = A_f \cdot \exp(i \cdot \varphi_f)$$

2. (currently amended): The method as claimed in claim 1, in which the complex number U_c is given by the following equation:

$$U_c = U_m - \alpha \cdot U_f$$

where α is a complex coefficient correcting for the fluctuations over time in φ_f and A_f between the measurements of φ_m and A_m, on the one hand, and of φ_f and A_f, on the other, this coefficient being equal to 1 in the absence of the correction.

3. (currently amended): The method as claimed in ~~any one of the preceding~~ claim[[s]] 1, in which a value of the corrected amplitude A_c is determined, this corrected amplitude being the amplitude of the complex number U_c.

4. (currently amended): The method as claimed in claim 2, in which the complex coefficient α is given by the following equation:

$$\alpha = \frac{U_r(t_1)}{U_r(t_0)}$$

where U_r represents a measurement of the phase and of the amplitude of a reference signal, the measurement $U_r(t_1)$ being concomitant with the measurement of U_m, and the measurement $U_r(t_0)$ being concomitant with the measurement of U_f.

5. (new): The method as claimed in claim 2, in which a value of the corrected amplitude A_c is determined, this corrected amplitude being the amplitude of the complex number U_c.